Date: Sun, 7 Aug 94 04:30:09 PDT
From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
Errors-To: Ham-Ant-Errors@UCSD.Edu
Reply-To: Ham-Ant@UCSD.Edu
Precedence: Bulk
Subject: Ham-Ant Digest V94 #250
To: Ham-Ant

Ham-Ant Digest   Sun, 7 Aug 94   Volume 94 : Issue 250

Today's Topics:

Send Replies or notes for publication to: <Ham-Ant@UCSD.Edu>
Send subscription requests to: <Ham-Ant-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Ant Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-ant".

Date: 5 Aug 1994 16:13:25 -0700
From: news.tek.com!cascade.ens.tek.com!not-for-mail@uunet.uu.net
Subject: ??? Butternut Stub
To: ham-ant@ucsd.edu

In article <31rf8f$607@insosf1.infonet.net> darkon@ins.infonet.net writes:
>I recently purchased a Butternut HF6-V used.
>The only part missing is the 75ohm matching stub.
>Does anyone know what the length of it is???
>
>Any info helpful...
>   DARKON@ins.infonet.net

Perhaps someone with the right antenna book or a little more up on stubs
can help you out with the length. I do know the stub is for 20 meters
because the HF6V is 3/8 wavelength long and requires the stub to give you

the correct impedance transformation. As I understand it is virtually
invisable to the other bands. I used to be more up on how this worked
but it's been along time since doing smith charts in college.

Terry, KI7M

Date: 6 Aug 94 15:18:40 GMT
From: news-mail-gateway@ucsd.edu
Subject: bob-tail curtain
To: ham-ant@ucsd.edu

Could someone lead me to information on the bob-tail curtain
or half bob-tail. Thanks
--
73
==
Robert Wood
WB5CRG
w5robert@blkbox.com   (blkbox is NOT blackbox, inc.!)
w5robert@blkbox.com@menudo.uh.edu
==

Date: 6 Aug 94 13:34:29 GMT
From: news-mail-gateway@ucsd.edu
Subject: Ham-Ant Digest V94 #249 -Reply
To: ham-ant@ucsd.edu

I'm on vacation until August 22. I'll read your message and reply
when I return. If you need assistance with Emission Monitoring or
Stack Testing, please contact Jerry Keefe or Jack Harvanek. Thanks

Alan Hicks

Date: Fri, 5 Aug 1994 21:29:32 GMT
From: ihnp4.ucsd.edu!agate!biosci!netnews.synoptics.com!news@network.ucsd.edu
Subject: JPole fundamentals
To: ham-ant@ucsd.edu

In article AsE@icon.rose.hp.com, greg@core.rose.hp.com (Greg Dolkas) writes:
>Alan Eldridge (alan.eldridge@dragonbbs.com) wrote:
>
>: Next, I'm going to start working on the Zepp antennas.

>
>Think about this a minute. That's what a J-pole is.
>
>Greg KD6KGW

Actually, I thought a J looked electrically like: (questionable ascii graphics)

```
    ______________________
    |_____
```

One continuous electrical (D.C.) short :>)

And a Zep like this:

```
        1/4 wave
        ______
        ________________________
```

and fed as shown. At least this is the description I heard of the Zep as was trailed behind a Zepplin. A good choice since no ground plane is required. I guess the J's matching section resembles the Zeps configuration and it gets lumped in with Zeps.

J's and Zeps, two different kinds of antennas? Am I wrong?

Dave
wa6qwl

Date: 5 Aug 1994 23:39:09 GMT
From: ihnp4.ucsd.edu!pacbell.com!UB.com!tandem!barrnet.net!agate!kennish@network.ucsd.edu
Subject: JPole fundamentals
To: ham-ant@ucsd.edu

In article <Cu2zp8.5yr@synoptics.com>,
David Bashaw <dbashaw@synoptics.com> wrote:
>Actually, I thought a J looked electrically like:

```
>    ______________________
>    |_____
```

>One continuous electrical (D.C.) short :>)

>And a Zep like this:

>   1/4 wave
>   ______
>   ________________________
>
>
>J's and Zeps, two different kinds of antennas? Am I wrong?

They are really the same thing. The ends of a 1/2 wave end-fed antenna
are at a high impedance. Going back a 1/4 wave on the transmission line
makes it look like a short. So putting a short there really doesn't
make a difference. Or perhaps more clearly, a shorted 1/4 wave
stub looks like an open at the other (unshorted) end, so it won't affect the
operation of the 1/2 wave section. Where you attach the coax determines
your feedpoint impedance.

                        ==Ken

Date: 5 Aug 1994 15:37:25 -0400
From: news1.digex.net!access1!ericr@uunet.uu.net
Subject: M-Square HF Log for Sale
To: ham-ant@ucsd.edu

M-Square 6-10LP log periodic antenna for sale.

6-10 Mhz, single feed, 5 elements.
Boom = 34 feet
Elements = 54 feet each
Weight = approx 100 lbs.

This antenna is new and in the box (i.e., never built).

Shipping is not included -- FOB Arlington, VA.

Asking price = $1000

Contact Eric Rosenberg, WD3Q
        ericr@access.digex.com
 or   ericr@vita.org

Date: Fri, 5 Aug 1994 22:44:56 GMT
From: world!hrick@uunet.uu.net
Subject: Question on FM broadcasts...

To: ham-ant@ucsd.edu

In article <dilcherCu2v2w.Asv@netcom.com>,
Jeffrey A. Dilcher <dilcher@netcom.com> wrote:
>On an FM broadcast, would one channel be transmitted on, say 92.1, and
>the other channel on, say, 92.2?

No, both channels are on essentially the same frequency. The mono signal
(L+R) is on the main freq, say 92.1. The stereo info (L minus R) is on a
subcarrier that rides piggyback on the main signal. The subcarrier is
amplitude modulated.

Date: Fri, 5 Aug 1994 19:49:44 GMT
From: ihnp4.ucsd.edu!dog.ee.lbl.gov!overload.lbl.gov!dancer.ca.sandia.gov!
cronkite.nersc.gov!fastrac.llnl.gov!lll-winken.llnl.gov!uop!pacbell.com!amdahl!
netcomsv!netcom.com!dilcher@network.ucsd.
Subject: Question on FM broadcasts...
To: ham-ant@ucsd.edu

On an FM broadcast, would one channel be transmitted on, say 92.1, and
the other channel on, say, 92.2?

I have a digital FM tuner that only has the "odd" frequencies, so I am
also wondering whether I would receive a broadcast on an "even" frequency...

Thanks for answering a very novice question,
Jeff

Date: Sat, 6 Aug 1994 15:31:45 GMT
From: ihnp4.ucsd.edu!news.cerf.net!gopher.sdsc.edu!nic-nac.CSU.net!
charnel.ecst.csuchico.edu!yeshua.marcam.com!zip.eecs.umich.edu!
newsxfer.itd.umich.edu!gatech!wa4mei!ke4zv!gary@network.ucsd.
Subject: Question on FM broadcasts...
To: ham-ant@ucsd.edu

In article <dilcherCu2v2w.Asv@netcom.com> dilcher@netcom.com (Jeffrey A. Dilcher)
writes:
>On an FM broadcast, would one channel be transmitted on, say 92.1, and
>the other channel on, say, 92.2?
>
>I have a digital FM tuner that only has the "odd" frequencies, so I am
>also wondering whether I would receive a broadcast on an "even" frequency...
>
>Thanks for answering a very novice question,

Jeff, FM broadcast channels are on 200 kHz centers, and are always at
"odd" frequencies, so there is no channel allocated at 92.2 MHz. The
bandplan is setup so that no co-channel stations are located within
150 miles of each other, no first adjacent channel stations are within
75-125 (varies) miles of each other, and third adjacent channel stations
require 25 mile spacing. So local stations should all be separated by
three channel positions on the dial.

Gary
--
Gary Coffman KE4ZV | You make it, | gatech!wa4mei!ke4zv!gary
Destructive Testing Systems | we break it. | uunet!rsiatl!ke4zv!gary
534 Shannon Way | Guaranteed! | emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | |

Date: 5 Aug 1994 11:24:24 GMT
From: ihnp4.ucsd.edu!news.acns.nwu.edu!math.ohio-state.edu!howland.reston.ans.net!
agate!doc.ic.ac.uk!uknet!fulcrum!strath-cs!bnr.co.uk!adsb@network.ucsd.edu
Subject: RG58 versus Thin Ethernet
To: ham-ant@ucsd.edu

In article <24992.9408041449@csu.napier.ac.uk>,
Alastair "J." Downs <ee17@csu.napier.ac.uk> wrote:
> Cable   TX DbW   Cable   Antenna   EIRP(DbW)   EIRP(W)
>   Loss   Gain
>
> RG58   14   -2.45   +3   14.55   28.5
> E/Net   14   -1.69   +3   15.31   34
>
>Nope ! The difference between 28.5 watts and 34 will never be
>noticed.

Agreed.

But if someone offered you a mechanism whereby you could reduce
your receiver's noise figure by 1.24 dB, I bet you'd sit up and be
interested.

Every dB of cable loss is a dB onto the noise figure of your
receiving setup.

The lower the cable loss, the better you receive.

Andrew Benham
---
adsb@bnr.co.uk   BNR Europe Ltd, 140 Greenway, Harlow Business Park,
                                 Harlow, Essex CM19 5QD
                 +44 279 402372   Fax: +44 279 402029
Home: g8fsl@g8fsl.ampr.org [44.131.181.17]

Date: Fri, 5 Aug 1994 22:22:43 +0000
From: ihnp4.ucsd.edu!agate!howland.reston.ans.net!pipex!demon!g4poi.demon.co.uk!
Dave@network.ucsd.edu
Subject: RG58 versus Thin Ethernet
To: ham-ant@ucsd.edu

In article <24992.9408041449@csu.napier.ac.uk>
           ee17@csu.napier.ac.uk "Alastair "J." Downs" writes:

>Thin Ethernet vs RG 58U
[...]

Thankyou Alastair. I happen to have a reel of thinnet cable and the need for
another antenna for 70cms. I shall give it a try and see how it performs.

I wonder if you have any thoughts on how weather proof it is likely to be?

--
David   Dave@g4poi.demon.co.uk

Date: Fri, 5 Aug 1994 20:52:57 +0000
From: ihnp4.ucsd.edu!pacbell.com!amdahl!news.fujitsu.com!barrnet.net!agate!
howland.reston.ans.net!pipex!demon!kirsta.demon.co.uk!John@network.ucsd.edu
Subject: RG58 versus Thin Ethernet
To: ham-ant@ucsd.edu

In article <24992.9408041449@csu.napier.ac.uk>
           ee17@csu.napier.ac.uk "Alastair "J." Downs" writes:

>   Thin Ethernet vs RG 58U
>
> Figures are given in Db's (negative assumed), frequencies are
> in MHz and each cable was fitted with BNC 50 ohm connectors.
>
> The thin ethernet used was RadioSpares 365-133 equivalent to
> Belden 9907, BICC H9590, NEK 06231 , multistrand centre,

> overall outer diameter 4.65 mm.
>
>
>   Freq   50   145   220   433   1300
>
>   RG58   1.28   2.45   2.26   5.47   9.8
                         ^^^^^^^^^^^^^^^

>   E/Net   0.91   1.69   3.36   3.52   6.5
                                    ^^^^^^^^^^^^^^

Very interesting stuff, Alastair - thanks for posting it.

Don't the underlined figures indicate a mismatch somewhere, giving rise
to resonance (swr) and hence frequency dependent effects?

73, John, GM4ANB

--
John Morris   email: John@kirsta.demon.co.uk   AX25: GM4ANB@GB7EDN.#77.GBR.EU

                      Absurdity: A statement or belief manifestly inconsistent
                                 with one's own opinion - Ambrose Bierce

----

Date: Fri, 5 Aug 1994 07:17:54 GMT
From: ihnp4.ucsd.edu!munnari.oz.au!yarrina.connect.com.au!
harbinger.cc.monash.edu.au!newsserver.trl.OZ.AU!pcm8128.trl.OZ.AU!
p.tyers@network.ucsd.edu
To: ham-ant@ucsd.edu

References <1994Aug4.140146.3237@brtph560.bnr.ca>, <cmwdr01.57.000B4905@nt.com>,
<1994Aug4.171411.9160@brtph560.bnr.ca>.trl
Subject : Re: G5RV grounding question

In article <1994Aug4.171411.9160@brtph560.bnr.ca> jwittich@b4pph107.bnr.ca
(Jeffrey Wittich) writes:

>In article <cmwdr01.57.000B4905@nt.com>, cmwdr01@nt.com (Dave Redfearn) writes:
>|>
>|> >Is my whole approach wrong?
>|>
>|> Yep :-)
>|> For the most efficient multi-band operation, you should remove the coax,
>|> feed the the antenna entirely with ladder line or 1" slotted twinlead, and
>use
>|> a balanced antenna tuner at the shack end.

>output. Thats what I get for cheaping it. BTW, to use twin lead,
>would I still leave the balun where it is or remove it with the coax
>and end up with a 104 ft dipole fed with twin lead?

Jeffrey,
            my $0.02 worth. Louis Varney G5RV in his original article and a later one recommended feeding the 32' of open wire with 75 ohm coax and NO BALUN. Rember the 32' of open wire (26' twin lead allowing for velocity factor) is an integral part of the G5RV antenna, ideally you use a balanced tuner at its end but otherwise his recommendation was unbalanced feed with 75 ohm coax.

73s
P Tyers, Tel. +61-(0)3-2536794   JANET: p.tyers%trl.oz.au@uk.ac.ucl.cs
ACSnet: p.tyers@trl.oz   UUCP:{uunet,hplabs,ukc}!munnari!trl.oz.au!p.tyers
CSnet: p.tyers@trl.oz.au   ARPAnet: p.tyers%trl.oz.au@uunet.uu.net HAM: VK3KTS
MAIL: Telecom Research Laboratories,P.O. Box 249,Clayton,VICTORIA 3168,AUSTRALIA

Date: 6 Aug 1994 00:33:52 -0400
From: peach!atl1!w4qo@uunet.uu.net
To: ham-ant@ucsd.edu

References <CtH91I.Io9@ucdavis.edu>, <w4qo.775888942@atl1>,
<1994Aug3.163819.29347@sol.cs.wmich.edu>
Subject : Re: ??Loop or dipole ..BEST??

radams@cs.wmich.edu (Robert Adams) writes:

>In article <w4qo.775888942@atl1>,
>James C. Stafford <w4qo@peach.america.net> wrote:
>>I'd vote for the loop.

>Screw the loop! I'll take a folded dipole any day.

Well, I might have thought the same thing a few years ago, but my friend Dave Fisher, W0MHS, has made a believer out of me. He wrote an article back in '84 (I think) for QST where he models out some of this stuff. I and a lot of friends started using the loops and they have performed remarkable well. I have not had a switch to compare to dipoles, but during contests they sure can provide good results especially in the 300-600 mile range on 80 and the 500-1000 mile range on 40.

End of Ham-Ant Digest V94 #250

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